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Springer Nature NIH public access plan RFI response

1. How to best ensure equity in publication opportunities for NIH-supported investigators.

The NIH Public Access Plan aims to maintain the existing broad discretion for researchers and authors to choose how and where to publish their results. Consistent with current practice, the NIH Public Access Plan allows the submission of final published articles to PubMed Central (PMC) (in cases where a formal agreement is in place) to minimize the compliance burden on NIH-supported researchers and also maintains the flexibility of NIH-supported researchers to submit the final peer-reviewed manuscript. NIH seeks information on additional steps it might consider taking to ensure that proposed changes to implementation of the NIH Public Access Policy do not create new inequities in publishing opportunities or reinforce existing ones.

SN Response:

Summary: To ensure equity in implementation of both publishing and open data aspects of the NIH Public Access Plan, NIH-supported investigators need the resources to support and enable their choice of compliance route.

Ensuring equity in publication opportunities for NIH-supported investigators means ensuring that every investigator, regardless of field, career stage, grant size, gender, ethnicity and institutional affiliation, has the resources available to them to choose where to publish and the route for compliance that enables that choice.

The plan in its current form allows compliance through either deposition of the “final peer-reviewed manuscript upon acceptance” (III.A.3.a. - i.e.“Accepted Manuscript” submission without any embargo / zero embargo green OA) or final published article submission (III.A.3.a. - ie. submission of the “Version of Record” / gold OA). Most journals in which NIH investigators currently choose to publish - including our own - support **only one** of these two routes: Gold Open Access – where the Version of Record is made freely available at publication.

By contrast, most journals and their publishers do not support the zero embargo green OA route - where an unfinished Accepted Manuscript is made openly available at the same time that the Version of Record is published. Such a model is simply not sustainable: it undermines the subscription model that supports it and slows progress towards the sustainable and scalable options for public access

that gold OA enables. Gold OA is the only sustainable model for trusted open access. So, to best ensure equity in publication opportunities NIH must make sure the funding is in place to support **any** NIH investigator that might wish to publish in journals which only support the Gold OA route.

Our work has also shown that authors complying through the Gold OA route are likely to achieve greater reach and impact for their papers than if they had elected for compliance via the Accepted Manuscript route. This dichotomy has the potential to exacerbate existing inequities between NIH-fundees and/or create new ones. Researchers that are less well-funded (which is more common for early career researchers, those in fields with small grant sizes, and those at minority-serving institutions or HBCUs) can be further disadvantaged because they are more likely to have to comply via zero-embargo Green, missing out on the impact and reach of gold OA .

The zero-embargo Green access approach is also unsustainable since it prevents maintenance of subscription income to pay for the costs and work of publishing. So ultimately it is essential that sufficient funding is made available to pay for reasonable APCs for Gold OA publication. The calls on NIH funding can be minimized where such funding is pooled with university library budgets via Transformative Agreements (TAs). Ultimately to achieve a full transition to sustainable open access there needs to be a way to align and maximize use of available funds to spread the load. TAs don't solve all sustainability and equity issues but, by combining funder and library funds, they are a strong step in the right direction … one that has proven to be a scalable solution that substantially reduces the administrative burden on researchers. Regardless of whether NIH grant funds are used to contribute to centralized TAs or to support author-mediated payments to enable Gold OA, the NIH needs to budget for, and monitor, such costs.

Specifically, we recommend that to avoid creating new inequalities or exacerbating existing ones during this transitional phase NIH should ask grantees to include an estimate of reasonable publishing costs for articles arising from the grant as a standard budget line item.

This approach will ensure that authors that are planning to comply via Gold OA will have requested sufficient funds to cover reasonable APCs. It will also enable NIH to better monitor and track potential inequities arising from, or being exacerbated by, differences in impact between the two different compliance routes.

We are aligned with STM's recent position statement regarding zero embargo Green OA / "Rights Retention Strategies" and their response to NIH's RfI. In particular we support the argument that many journals need exclusive publishing rights to support sustainable business models and continued investment. Our longstanding position on this topic is clear: mandatory obligations being placed on grant fundees (already overburdened with compliance obligations), to openly license unfinished versions of their papers put them in a difficult position, undermine progress towards full sustainable public access for research papers and force publishers to maintain paywalls and defend subscription revenue.

To demonstrate their commitment to maintaining researchers' free choice about where to publish, as well as the integrity and independence of the QA processes that publishers implement, NIH should not place any such burden upon the researchers it funds.

The scientific data requirements of the NIH Public Access Plan also put a substantial compliance burden on NIH-supported investigators. Publishers are ideally placed to support requirements to make scientific data *"freely available and publicly accessible by default at the time of publication"* through policy and infrastructural support for integration of machine readable persistent identifiers (PIDs). However, as for achieving equity in publishing opportunities, to achieve full open data compliance will require sufficient support to be put in place for every investigator, regardless of field, career stage, grant size, gender, ethnicity and institutional affiliation.

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2. Steps for improving equity in access and accessibility of publications.

Removal of the currently allowable 12-month embargo period for NIH-supported publications will improve access to these research products for all. As noted in the NIH Public Access Plan, NIH also plans to continue making articles available in human and machine-readable forms to support automated text processing. NIH will also seek ways to improve the accessibility of publications via assistive devices. NIH welcomes input on other steps that could be taken to improve equity in access to publications by diverse communities of users, including researchers, clinicians and public health officials, students and educators, and other members of the public.

SN Response:

Summary: To improve equity in access and accessibility of publications NIH needs to monitor and maximize the proportion of NIH-supported publications complying through Gold OA.

Gold OA maximizes access not only by enabling free online access to humans and machines but also by enabling re-use, re-formatting, aggregation, and other procedures to make the content discoverable, accessible and usable by diverse communities according to their specific needs. The Version of Record, which Gold OA makes accessible, is the complete, authoritative and up-to-date version of the paper, curated and maintained by publishers and editors. Our work shows that researchers prefer the VoR over the unfinished Accepted Manuscript, both as readers and authors.

So there are significant disadvantages for those that do not have access to the VoR. Therefore to maximize the equity benefits as the NIH Public Access Plan is implemented it is important that the proportion of compliance through Gold OA is maximized and monitored. The full equity benefits of the NIH Public Access Plan can only be realized when there are no paywalls around any

NIH-supported VoRs. Until then less-well resourced researchers and, more importantly, **a large proportion of the US public, including many clinicians, public health officials, students and educators,** will only have access to unfinished inferior versions of any papers that have complied with the plan via the zero embargo Green route.

Given this: we recommend that NIH should include an explicit preference / encouragement for compliance via Gold OA in its guidance for researchers, as for example included In the FAQs for the NASA policy for the Science Mission Directorate

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3. Methods for monitoring evolving costs and impacts on affected communities.

NIH proposes to actively monitor trends in publication fees and policies to ensure that they remain reasonable and equitable. NIH seeks information on effective approaches for monitoring trends in publication fees and equity in publication opportunities.

SN Response:

Summary: To monitor costs and impacts of the NIH Public Access Plan, the NIH should, where possible, work with institutions and their libraries to leverage Transformative Agreements and other equivalent centralized payment arrangements. Differences in impact between green and Gold OA compliance paths and their knock-on effect on equity should be monitored.

The only sustainable publishing model requires payment of publication fees (APCs) so there should be guidance to grantees that these need to be estimated and included in their applications. The funding burden on NIH for these can be minimized if grant money is pooled with university library money and this is best achieved via Transformative Agreements (TAs). These TAs can then be used to monitor and report on these costs to universities and funders like the NIH.

TAs don't solve all sustainability and equity issues but, by combining funder and library funds, they are a strong step in the right direction that has proven to be a scalable solution that substantially reduces the administrative burden on researchers. Regardless of whether NIH grants are used to contribute to centralized TAs or to support author-mediated payments to enable Gold OA, the NIH needs to budget for, and monitor, such costs.

Our work has shown that authors complying through the Gold OA route are likely to achieve greater reach and impact for their papers than if they had elected for compliance via the Accepted Manuscript route. This dichotomy has the potential to exacerbate existing inequities between NIH-fundees and/or create new ones. Researchers that are less well-funded (which is more common

for early career researchers, those in fields with small grant sizes, and those at minority-serving institutions or HBCUs) can be further disadvantaged because they are more likely to have to comply via zero-embargo Green, missing out on the impact and reach of Gold OA .

Therefore we recommend that differences in impact between green and gold OA compliance paths and their knock-on impact on potentially disadvantaged NIH-investigators should be quantified and regularly reported.

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4. Early input on considerations to increase findability and transparency of research.

Section IV of the NIH Public Access Plan is a first step in developing the NIH's updated plan for persistent identifiers (PIDs) and metadata, which will be submitted to OSTP by December 31, 2024. NIH seeks suggestions on any specific issues that should be considered in efforts to improve use of PIDs and metadata, including information about experiences institutions and researchers have had with adoption of different identifiers.

SN Response:

Summary: Publishers are key partners in deploying and integrating metadata and PIDs to enable a more efficient, transparent and impactful open science ecosystem

Publishers are ideally placed to support increasing findability and transparency of research through policy and infrastructural support for integration of machine readable persistent identifiers (PIDs). We would welcome the chance to work through with NIH the most beneficial PIDs and metadata and their use cases. These are *some* of the PIDs and metadata we are already including in our publications:

- **DOI** (Digital Object Identifier) for outputs/publications, i.e. eBooks, ejournals, journal articles and chapters
- **ORCID** (Open Researcher and Contributor iD) for persons, i.e. authors and editors
- **Crossref Funder ID** for grant-giving organizations
- **GRID ID** (Global Research Identifier Database iD) and **ISNI ID** (International Standard Name Identifier) for research organizations/affiliations.
- **Grant Numbers:** we collect "Grant Numbers" and incorporate them in our metadata that is also deposited at Crossref
- **Conference Series ID**
- **Clinical Trial ID**
- **Article, Issue Copyright Holder**
- **Article, Issue Copyright Year**

- **Keywords**
- **Registration, Received, Accepted, Issue Online Dates**
- **Article Citation ID**

We also actively contribute in multiple ways to cross-industry efforts in this area through STM, Crossref, ORCID, CHORUS (for example our participation in the CHORUS/CSIRO pilot on research resources and facilities) and others.

We recommend that NIH works closely with publishers in general, and particularly these pre-existing cross-industry organizations, to maximize the impact of the revised plan for PIDs and metadata.

Springer Nature NIH Response: Additional Points

Further to the direct responses we want to raise several specific additional points regarding the *NIH Plan to Enhance Public Access to the Results of NIH-Supported Research*

1. The plan outlines an expectation that the deposition of the "final peer-reviewed manuscript" (the Accepted Manuscript) to the NIHMS system *upon acceptance*. As authors in journals offering both OA and subscription publishing options choose their preferred option **subsequent** to acceptance it would be helpful to make it clear that the deposition can occur as soon as possible **after** this decision has been made.

2. We would also seek clarity on the timeline for this plan to become implemented as policy: exactly what is meant by "an effective date no later than December 31, 2025" - e.g. would the policy apply to all papers from that date that (a) arise from new grant calls, (b) arise from new grants awarded, (c) are submitted to a journal or (d) are published? We recommend option (a) since that would allow all stakeholders the maximum amount of time to adapt to this new policy.

3. The plan states that the Gold OA option involves, "publishing in a journal with a formal agreement with NLM to submit "final published articles" (the Version of Record) to be available in PMC on publication."
    a. What if a journal is best suited to the research to be published but does not have an agreement?
    b. Can authors deposit the VoR in PMC themselves? If not, what is the rationale for prohibiting this?

4. The plan implies authors are free to choose where to publish but it also implies restrictions to what funding will be approved. As per our main responses we recommend that NIH should monitor and maximize the proportion of NIH-supported publications complying through Gold OA.and ensure there is sufficient funding to support gold OA for all papers that NIH-supported investigators choose to publish in journals that only support that route. However **if** funding restrictions are to be applied:
    a. How will these be communicated? How much funding is available for Gold OA?
    b. We need to work together on education/signposting for researchers on how they should budget for publication fees.
    c. NIH should create a mechanism for authors to fund publishing charges after the grant has closed

5. The plan states that a requirement is that "Costs are charged consistently regardless of the source of support". Most reputable publishers, including Springer Nature, grant full or partial waivers for APCs for authors without access to sufficient funding. For this reason we recommend that the wording is clarified to indicate that the intent of this requirement is that NIH-supported researchers should not be charged at a higher level compared to other authors, rather than ruling out variation in APC pricing to take account of financial need.